ABSTRACT OF THE DISCLOSURE

A communication control apparatus which effectively uses a memory and does not need complicated hardware is realized. Each area of a frame assembly memory 2 is set to the maximum frame length which is handled. When a cell of a new connection is inputted, a memory write control unit (1) allocates the connection to an empty area in the memory (2) and writes the cell therein. When the cell of the same connection as that already allocated to any area is inputted, it is written into the allocated area. If a plurality of cells of one frame have already been written in the area of the same connection, the connection is allocated to another new area and the cell is written therein. A memory read control unit (3) reads out the cells of one frame and outputs them as one completed-frame data.